

E/C

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/615,710	RIBARICH, THOMAS J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ephrem Alemu	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3-21-05.
2. ☒ The allowed claim(s) is/are 5-9, 11-13 and 15-22.
3. ☒ The drawings filed on 08 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

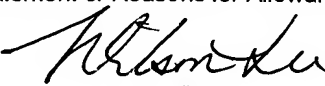
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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**WILSON LEE**  
**PRIMARY EXAMINER**

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 5-9, 11-13 and 15-22 are allowed.
2. The following is an examiner's statement of reasons for allowance: It is agreed that the prior art of record fail to teach or suggest alone or in combination, the combination of the following limitations: "power factor control circuitry coupled to the ballast control circuitry and operable to regulate ballast power to obtain an improved power factor correction for the ballast; wherein the power factor control circuitry is selectively operable at a high gain to obtain a fast response or at a low gain for power factor correction optimization" as claimed in claim 5; "power factor control circuitry coupled to the ballast control circuitry and operable to regulate ballast power to obtain an improved power factor correction for the ballast; wherein the power factor control circuitry includes a switch, an on time of the switch being increased when a voltage of the input power approaches zero" as claimed in claim 6; "increasing a switch on time as the input voltage approaches the zero crossing to provide for power factor correction with reduced crossover distortion; increasing a gain of a power factor correction loop to obtain a fast response; reducing a gain of a power factor correction loop to optimize ballast power factor; and controlling an inductor by activating a switch in a boost type power factor correction circuit" as claimed in claim 8; "a variable gain control section coupled to the input voltage sensing section and operable to provide variable closed loop feedback gain in the power factor correction circuit; a compensation indication coupled to the variable gain control section for influencing a closed loop gain of the variable gain control section; an output section coupled to the variable gain control section and the inductor sensing section for driving a power factor correction switch,

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an on time of the output section being related to the input voltage, the variable closed loop gain and the zero current crossing” as claimed in claim 11; and “power factor control circuitry coupled to the ballast control circuitry and operable to regulate ballast power to obtain an improved power factor correction for the ballast; wherein the power factor control circuit includes a boost type power converter operated in critical condition mode” as claimed in claim 15. It is for these reasons in combination with all the other limitations in the independent claims 5, 6, 8, 11 and 15, that claims 5-9, 11-13 and 15-22 are allowable over prior art of record.

#### ***Remarks***

3. The prior art of Wihelm et al. (US 6,211,623) has been cited in this office action since it has been inadvertently omitted on the listing of the references cited form, PTO-892, in the office action mailed on 6/07/04.

#### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA  
5-24-05



**WILSON LEE**  
**PRIMARY EXAMINER**